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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/666,303	09/21/2000	Johann-Peter Melder	46915 DIV	1946

26474 7590 09/23/2003

KEIL & WEINKAUF  
1350 CONNECTICUT AVENUE, N.W.  
WASHINGTON, DC 20036

EXAMINER
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BARTS, SAMUEL A

ART UNIT	PAPER NUMBER
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1621

DATE MAILED: 09/23/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/666,303

Applicant(s)

MELDER ET AL.

Examiner

Samuel A Barts

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 July 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 14-16 and 18-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☒ Claim(s) 24 is/are objected to.
- 8) ☒ Claim(s) 14-16 and 18-24 are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All   b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>8</u> . | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Election/Restrictions*

1. Applicant's election of the species wherein the polyalkylene is derived for isobutene and the amine portion is derived from ammonia in Paper No. 11 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

### *Claim Objections*

1. Claim 24 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. The claim states, "where there is no hydroxyl group...". However, applicant has already amended claim 14 by removing the term "hydroxyalkyl". Furthermore, the variables  $R_{1-4}$  are not substituted with a hydroxy group. Thus, claim 24 requires a limitation that does not exist<sup>1</sup>.

### *Claim Rejections - 35 USC § 102*

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<sup>1</sup> Please note if applicant's intends to pursue claim 24, the examiner respectfully request that it be pointed out where in the specification supports exist for the claimed language

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2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this

Office action:

A person shall be entitled to a patent unless –  
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 14-16, 18-20 and 24 rejected under 35 U.S.C. 102(b) as being anticipated by Brown et al (US 5,124,484).

Brown et al teach a process for making polyisobutene amines which are used as fuel additives. See column 1 lines 56-69 and column 2 lines 1-16, lines 44-55. Note the weight of the reactant used to make the polyisobutene amines in column 2 lines 31-34. Also see the examples. In example 1 applicant used a molecular weight of 1190 g/mol. Thus, the polyisobutene made from this reactant would have approximately the same weight since the carbonyl group is substituted with an amino group.

The instant claimed invention is directed to polyalkylene amines which are substantially free of halides. Applicant's elected species is not anticipated since the exemplified example of Brown et al used 3(dimethylamino)propylamine. Please note the term "substantially free" has not been defined in the specification. The examiner has taken this term to mean that the composition of halides is 49% or less. The prior art of Brown is silent on the amount of halide

present in the composition. However, it is safe to assume that is was less than 49%. Thus, the phrase substantially free of halides is inherent is the teaching of Brown et al. The molecular weight of the product made in Brown et al appears to fall within the claimed range

Note claims 18-20 mention a derivation step for the final product. This step is afforded little weight without a showing of how the step imparts something specific to the final composition.

***Claim Rejections - 35 USC § 103***


4. Claims 14, 16, 21 and 22 rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Brown et al.

Brown et al taught the polyisobutene as a fuel additive. He gives amounts in ppm. The amounts may fall within the claimed range. If the claimed concentration is not disclosed in Brown et al, it is obvious because one skilled in the art would be motivated to optimize the amount of the polyisobutene additive. The lubricant claim is obvious because the class of compounds were well known to be useful as fuel and lubricants additives. See for example the art of record Dever et al wherein he states that the polybutene amines are known as fuel and lube oil additives.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Samuel A Barts whose telephone number is 703-308-4630. The examiner can normally be reached on 6:30-3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Johan Richter can be reached on 308-1235. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1235.

  
Samuel A Barts  
Primary Examiner  
Art Unit 1621

s.b.